

Date: Wednesday, 26/11/2008 8:18:59 AM  
User: Jean-Luc Menard

# **Process Sheet**

|                                    |   |                           |                |
|------------------------------------|---|---------------------------|----------------|
| <b>Customer</b> :                  | CU-DAR001 Dart Helicopters Services   | <b>Drawing Name</b> :     | BLADE FITTING  |
| <b>Job Number</b> :                | 43730   |                           |                |
| <b>Estimate Number</b> :           | 12299   |                           |                |
| <b>P.O. Number</b> :               |   | <b>Part Number</b> :      | D3488041       |
| <b>This Issue</b> :                | 26/11/2008  | <b>S.O. No.</b> :         |                |
| <b>Prsht Rev.</b> :                | NC  | <b>Drawing Number</b> :   | D3488 / DSK101 |
| <b>First Issue</b> :               | 1 /   | <b>Project Number</b> :   | N/A            |
| <b>Previous Run</b> :              | 41853   | <b>Drawing Revision</b> : | B / D          |
| <b>Written By</b> :                | <i>[Signature]</i> 07.11.26   | <b>Material</b> :         |                |
| <b>Checked &amp; Approved By</b> : |   | <b>Due Date</b> :         | 03/12/2008     |
| <b>Comment</b> :                   | Est Rev:A New Issue 06-02-28 JLM<br>Est Rev:B As per Rev B 06-03-30 JLM<br>Est Rev:C Now On Doosan Lathe JLM Verified BY:DD |                           |                |

## **Additional Product**

Job Number:



|                |                              |                      |
|----------------|------------------------------|----------------------|
| <b>Seq. #:</b> | <b>Machine Or Operation:</b> | <b>Description :</b> |
|----------------|------------------------------|----------------------|

|     |          |                        |
|-----|----------|------------------------|
| 1.0 | D6103003 | Round Billet, Aluminum |
|-----|----------|------------------------|



**Comment:** Qty.: 1.0000 Each(s)/Unit: Total : 1.0000 Each(s)  
 Alluminum Round Billet D6103-003  
 Batch: 1342281 (1)

|     |              |              |
|-----|--------------|--------------|
| 2.0 | DOOSAN LATHE | DOOSAN LATHE |
|-----|--------------|--------------|



**Comment:** DOOSAN LATHE  
 1-Turn as per Dwg DSK 101 & Folio FA625  
 2-Deburr SA 08/11/26 (1)

|     |     |  |
|-----|-----|--|
| 3.0 | QC2 | INSPECT PARTS AS THEY COME OFF MACHINE |
|-----|-----|--|



**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE SA 08/11/26 (1)

|     |       |                                |
|-----|-------|--------------------------------|
| 4.0 | HAAS1 | HAAS CNC VERTICAL MACHINING #1 |
|-----|-------|--------------------------------|



**Comment:** HAAS CNC VERTICAL MACHINING #1  
 1-Machine as per Folio FA625 & Dwg D3488  
 2-Deburr 20 08/11/27 (1)

|     |     |  |
|-----|-----|--|
| 5.0 | QC2 | INSPECT PARTS AS THEY COME OFF MACHINE |
|-----|-----|--|



**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE 20 08/11/27 (1)



## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BLADE FITTING

Job Number: 43730

Part Number: D3488041

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

JL 08/12/01 (1)

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

MS 08/12-101 (1)

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

11:10  
320 OF  
11:40

M-L 08/12/01

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FZ 08/12/01 (1)

10.0

ALS71032225

INSERT



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 ALS7-1032-225 Insert

M100621

M-L

11.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install Inserts as per Dwg D3488

M-L 08/12/01

12.0

QC5

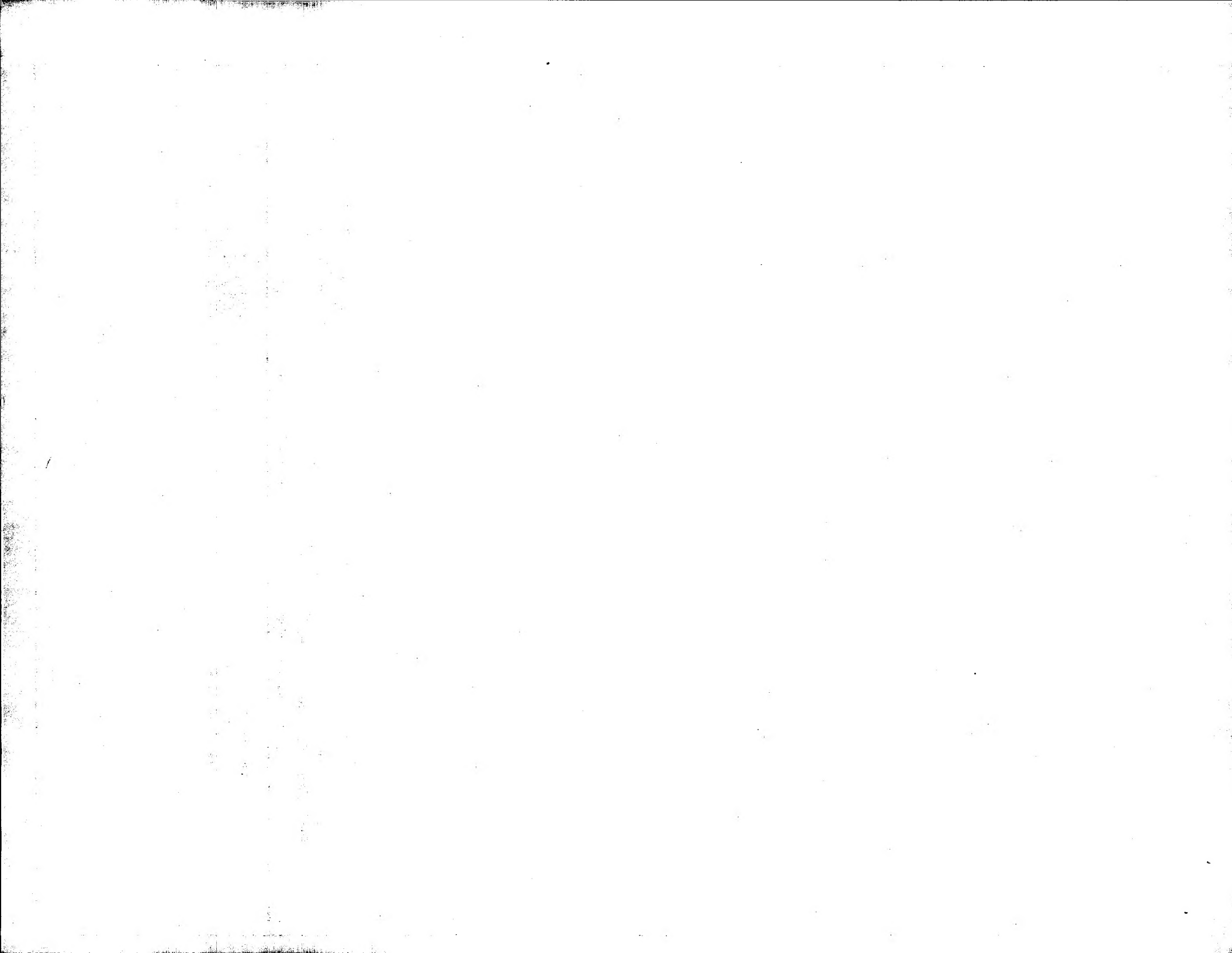
INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

MS 08 12 01

(1)



## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BLADE FITTING

Job Number: 43730

Part Number: D3488041

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

PACKAGING 1

PACKAGING RESOURCE #1



(14)

Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

FP-8

m-h 08/12/01

14.0

QC21

FINAL INSPECTION/W/O RELEASE



08/12/02

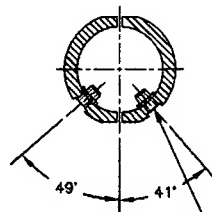
Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



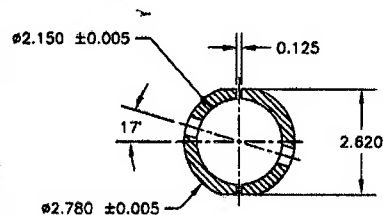
mf 08-12-01

w/043730



SECTION B-B

Ø0.297  
C'BORE Ø0.430 x 0.100  
INSTALL ALS4-1032-225 (OR AKS4-1032-225  
OR ALS7-1032-225 OR AKS7-1032-225)  
INSERTS AFTER FINISH  
(4 PLACES)



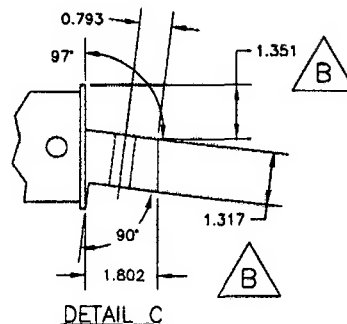
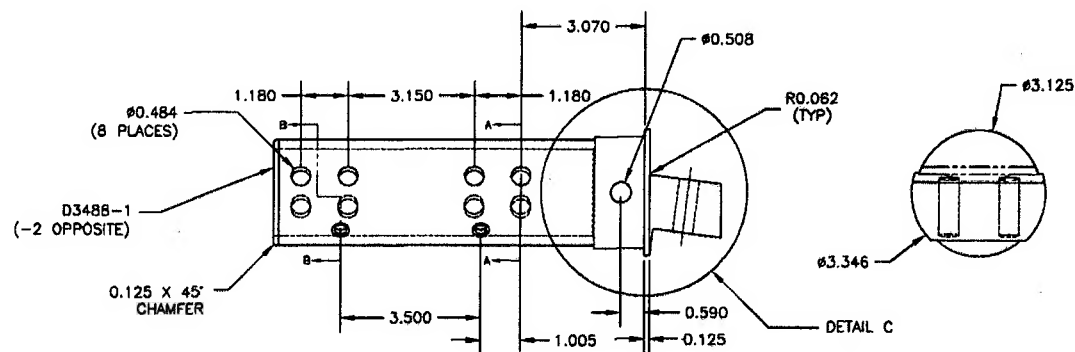
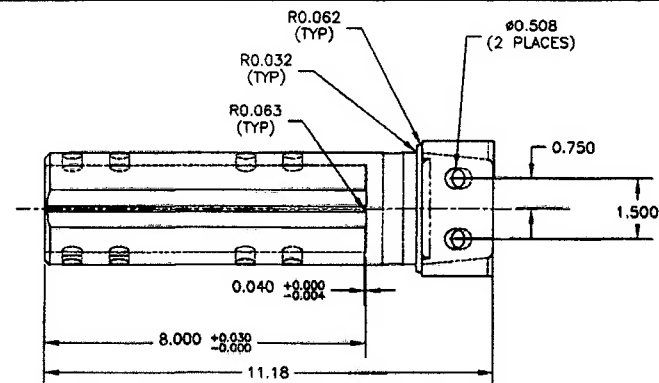
SECTION A-A

D3488-041/-042 BLADE FITTING ASSEMBLY PARTS LIST

| QTY  | QTY  | PART NUMBER   | DESCRIPTION                 |
|------|------|---|-----------------------------|
| -041 | -042 |   |                             |
| X    | X    | D3488-041   | BLADE FITTING ASSEMBLY (LH) |
|      |      | D3488-042   | BLADE FITTING ASSEMBLY (RH) |
| 1    |      | D3488-1   | BLADE FITTING (LH)          |
|      | 1    | D3488-2   | BLADE FITTING (RH)          |
| 4    | 4    | ALS4-1032-225<br>or AKS4-1032-225<br>or ALS7-1032-225<br>or AKS7-1032-225 | INSERT                      |

D3488-041/-042 BLADE FITTING

- MATERIAL: MAKE D3488-1/-2 FROM ALUMINUM 7075-T7351 ROUND BAR PER QQ-A-225/9 (REF. DART MATERIAL SPEC M7075T73R)
- FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 POWDER COAT WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- BREAK UNMARKED SHARP EDGES 0.010 TO 0.020
- INSTALL INSERTS AFTER POWDER COAT
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



DETAIL C

D3488-041 SHOWN (D3488-042 OPPOSITE)

RELEASED  
06.03.15 PH  
PER DS  
ELN #784

|         |          |                  |
|---------|----------|------------------|
| B       | 06.03.15 | CHANGE THICKNESS |
| A       | 05.12.20 | NEW ISSUE        |
| DESIGN  | PH       | DRAWN BY PH      |
| CHECKED | PH       | APPROVED PH      |
| DATE    | 06.03.15 | TITLE            |
|         |          | BLADE FITTING    |
|         |          | REV. B           |
|         |          | SHEET 1 OF 1     |
|         |          | SCALE            |
|         |          | 1:3              |

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**DART** DART AEROSPACE USA, INC.  
PORT HADLOCK, MA



|   |  |                     |         |
|---|--|---------------------|---------|
| <b>DART AEROSPACE LTD</b>   |  | <b>Work Order:</b>  | 43730   |
| <b>Description:</b> Blade Fitting, LH / Turning Detail for D3488-1/-2 |  | <b>Part Number:</b> | D3488-1 |
| <b>Inspection Dwg:</b> D3488 / DSK101 <b>Rev:</b> B / D               |  | <b>Page 1 of 2</b>  |         |

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article    ☐ Prototype

| Drawing Dimension    | Tolerance           | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|----------------------|---------------------|------------------|--------|--------|----------------------|----------|
| <b>Lathe Section</b> |                     |                  |        |        |                      |          |
| Ø2.150               | +/-0.005            | 2.145            | /      |        |                      |          |
| Ø2.780               | +/-0.005            | 2.781            | /      |        |                      |          |
| Ø3.125               | +/-0.010            | 3.124            | /      |        |                      |          |
| Ø3.346               | +/-0.010            | 3.344            | /      |        |                      |          |
| 0.125 x 45°          | +/-0.010 x +/-0.1°  | .118 x 45°       | /      |        |                      |          |
| 8.000                | +0.030/-0.000       | 8.012            | /      |        |                      |          |
| 9.250                | +/-0.010            | 9.248            | /      |        |                      |          |
| 0.188                | +/-0.010            | .187             | /      |        |                      |          |
| R0.032               | +/-0.010            | R.032            | /      |        |                      |          |
| R0.062               | +/-0.010            | R.062            | /      |        |                      |          |
| Ø0.297               | +0.005/-0.001       | Ø.299            | /      |        |                      |          |
| Ø0.430               | +/-0.010            | Ø.430            | /      |        |                      |          |
| 0.100                | +/-0.010            | .108             | /      |        |                      |          |
| 0.125                | +/-0.010            | .126             | /      |        |                      |          |
| 2.620                | +/-0.010            | 2.618            | /      |        |                      |          |
| 3.500                | +/-0.010            | 3.500            | /      |        |                      |          |
| 1.005                | +/-0.010            | 1.005            | /      |        |                      |          |
| Ø0.484               | +0.005/-0.001       | Ø.484            | /      |        |                      |          |
| 1.180                | +/-0.010            | 1.180            | /      |        |                      |          |
| 3.150                | +/-0.010            | 3.150            | /      |        |                      |          |
| 3.070                | +/-0.010            | 3.065            | /      |        |                      |          |
| <del>8.000</del>     | <del>+/-0.010</del> | <del>8.0</del>   |        |        |                      |          |
| R0.063               | +/-0.010            | R0.063           | /      |        |                      |          |
|                      |                     |                  |        |        |                      |          |
|                      |                     |                  |        |        |                      |          |

N/A  
 2/18/11



|   |  |                     |         |
|---|--|---------------------|---------|
| <b>DART AEROSPACE LTD</b>   |  | <b>Work Order:</b>  | 43730   |
| <b>Description:</b> Blade Fitting, LH / Turning Detail for D3488-1/-2 |  | <b>Part Number:</b> | D3488-1 |
| <b>Inspection Dwg:</b> D3488 / DSK101 <b>Rev:</b> B / D               |  | <b>Page 2 of 2</b>  |         |

| Drawing Dimension      | Tolerance     | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|------------------------|---------------|------------------|--------|--------|----------------------|----------|
| <b>Milling Section</b> |               |                  |        |        |                      |          |
| Ø0.508                 | +0.006/-0.001 | 1.509            |        |        |                      |          |
| 0.750                  | +/-0.010      | .750             |        |        |                      |          |
| 1.500                  | +/-0.010      | 1.500            |        |        |                      |          |
| 11.18                  | +/-0.030      | 11.184           |        |        |                      |          |
| R0.062                 | +/-0.010      | R0.062           |        |        |                      |          |
| 0.125                  | +/-0.010      | .130             |        |        |                      |          |
| 0.590                  | +/-0.010      | .590             |        |        |                      |          |
| 0.793                  | +/-0.010      | .793             |        |        |                      |          |
| 1.351                  | +/-0.010      | 1.349            |        |        |                      |          |
| 1.317                  | +/-0.010      | 1.317            |        |        |                      |          |
| 1.802                  | +/-0.010      | 1.802            |        |        |                      |          |
|                        |               |                  |        |        |                      |          |
|                        |               |                  |        |        |                      |          |
|                        |               |                  |        |        |                      |          |

|                     |          |                    |          |                            |     |
|---------------------|----------|--------------------|----------|----------------------------|-----|
| <b>Measured by:</b> | 29       | <b>Audited by:</b> | JL       | <b>Prototype Approval:</b> | N/A |
| <b>Date:</b>        | 05/11/09 | <b>Date:</b>       | 08/12/01 | <b>Date:</b>               | N/A |

| Rev | Date     | Change    | Revised by | Approved |
|-----|----------|-----------|------------|----------|
| A   | 06.03.31 | New Issue | KJ/JLM     |          |
| B   | 08.09.19 | Reformat  | KJ/JLM     |          |

P/O D3488-041